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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/669,032	09/25/2000	Ryota Mita	16869P-014900US	3497

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EXAMINER

CHAU, COREY P

ART UNIT	PAPER NUMBER
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2644

DATE MAILED: 04/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/669,032

Applicant(s)

MITA ET AL.

Examiner

Corey P Chau

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-16 is/are pending in the application.
- 4a) Of the above claim(s) 1-7 and 17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09/25/00 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Claims 1-7 and 17 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected an invention, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 5.
2. Applicant's election without traverse of an invention in Paper No. 5 is acknowledged.

Specification

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and **generally limited to a single paragraph** on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Objections

4. Claim 14 is objected to because of the following informalities: The preamble of Claim 14, "A melody sound reproducing method unit" is inconsistent with the preamble of Claim 13, "A melody sound reproducing method for a melody sound reproducing unit". Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claims 8, 9, 11, 12, and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S Patent No. 6501967 to Makela et al. (hereafter as Makela).

7. Regarding Claim 8, Makela discloses a melody sound reproducing unit (1) comprising:

a speaker (17) for providing specified output in a range between a first frequency and a second frequency (column 5, lines 47-56; column 5, line 62 to column 6, lines 24);

a memory means (12) for storing signal data corresponding to an audio signal to be generated by the signal generating means (abstract; column 2, lines 42-50; claim 1);
and

a control means (11) for controlling said signal generating means based on said signal data (column 5, lines 30-61);

wherein said signal data is stored in said memory means (12) when the frequency of the corresponding audio signal is in a range between said first frequency and said second frequency (abstract); and

the audio signal whose having a frequency is in a range between said first frequency and said second frequency is supplied to said speaker (17).

8. Regarding Claim 9, Makela discloses the signal data includes interval data, and scale data, and as well tone data (i.e. information defining the ringing tone is input as a characters, each character defining both pitch and duration of a tone and stored in the memory) (abstract) ;

said memory means stores a plurality of pieces of signal data having first tone data in a specified order and stores plurality of pieces of signal data having second tone data in a specified order (i.e. tones, i.e. notes and rests, can be selected, e.g., from a note menu, and they an be placed in the desired place on the stave displayed on the display and then stored as the ringing tone) (Fig. 2B); and

said control means controls said signal generating means in such a manner that generates an audio signal corresponding to the signal data having said first tone data and an audio signal corresponding to the signal data having said second tone data are generated with predetermined timing (column 6, lines 25-44).

9. Claim 11 is essentially similar to Claim 8 and is rejected for the reasons stated apropos to Claim 8.

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10. Claim 12 is essentially similar to Claim 9 and is rejected for the reasons stated apropos to Claim 9.

11. Claim 15 is essentially similar to Claim 8 and is rejected for the reasons stated apropos to Claim 8.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 10, 13, 14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S Patent No. 6501967 to Makela et al. (hereafter as Makela) in view of U.S. Patent No. 6100462 to Aoki.

14. Regarding Claim 10, Makela discloses a melody sound reproducing unit, but does not expressly disclose the audio signal corresponding to the signal data having the first tone data and the audio signal corresponding to the signal data having the second tone data form a chord relation in intervals and scales with each other in terms of their intervals and scales. However it would have been obvious to one of ordinary skill in the art at the time the invention was made to seek known methods of melody sound reproducing in order produce different kinds of ringing tones, which is easily recognized and distinguished from the ringing tones of other phones (column 7, lines 3-21). Aoki for example, discloses an apparatus and method for generating melody, which will feel

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natural from a musical point of view and is applicable in various kinds of electronic musical apparatuses such as an electronic musical instrument, an automatic music composing apparatus, and a computer-system-configured music composing apparatus.

Aoki discloses a method for generating a melody which comprises the steps of:

inputting key information which designates a key and chord information which designates chords for a melody to be generated; providing available note scales based on the inputted key information and the chord information; targeting a note at a time position among a succession of time positions defining a rhythmic progression of the melody to be generated, the step of targeting occurring in a sequence; selecting for each targeted note a note pitch from among the provided available note scale; and aligning the selected note pitches in the targeted sequence. It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ any known methods of melody sound reproducing, such as that of Aoki. Therefore it would have been obvious to modify the melody sound reproducing unit of Makela with the teaching of Aoki to utilize the apparatus and method for generating melody, which will feel natural from a musical point of view and is applicable in various kinds of electronic musical apparatuses.

15. Claim 13 is essentially similar to Claims 8 and 10 and is rejected for the reasons stated apropos to Claims 8 and 10.

16. Claim 14 is essentially similar to Claim 10 and is rejected for the reasons stated apropos to Claim 10.

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17. Claim 16 is essentially similar to Claim 14 and is rejected for the reason stated apropos to Claim 14.

Conclusion

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Corey P Chau whose telephone number is (703)305-0683. The examiner can normally be reached on Monday - Friday 9:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W Isen can be reached on (703)305-4386. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

April 19, 2004



SPE, AT Unit 2644